

ABSTRACT OF THE DISCLOSURE

An ATPG unit permits allocation of a don't care X as a state for activating a propagating path of a failure and, after a change in network, transfers the state from the don't care X to an uncontrol value, 5 thereby activating the propagating path of the failure. Further, the ATPG unit supplies a system clock as a sending clock to a sending FF, gives a change to the network from the sending FF, propagates 10 the change, supplies the system clock as a receiving clock to a receiving FF, and captures the network change, thereby propagating a state for detecting a delay failure to a path between the sending FF and the receiving FF and generating a test pattern when 15 the propagation succeeds.